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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,865	07/10/2001	Che-Kuei Mai	MR2863-24	5991
4586	7590 12/28/2004	•	EXAMINER	
	RG, KLEIN & LEE	CARTER, TIA A		
	OTT CENTER DRIVE CITY, MD 21043	-SUITE 101	ART UNIT	PAPER NUMBER
BEEROOTT			2626	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/900,865	MAI ET AL.			
Office Action Summary	Examiner	Art Unit			
	Tia A Carter	2626			
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep. If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tin by within the statutory minimum of thirty (30) day i will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on					
2a) ☐ This action is FINAL . 2b) ☑ Thi	is action is non-final.				
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims		•			
4) ☐ Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-8 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/	awn from consideration.				
Application Papers					
9) The specification is objected to by the Examin	ner.				
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of: 1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Bures * See the attached detailed Office action for a list	nts have been received. Ints have been received in Applicat Ority documents have been receive au (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:				

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melman et al. (US. 5359458) in view of Admitted Prior Art.

Regarding claim 1, Melman et al. discloses a method for calibrating illumination of a black-light module of an image scanning device by employing a longitudinally-extending calibration zone to obtain a back-light source with a uniform distribution of illumination in a longitudinal direction of the image scanning device (figs. 1-2, col. 3, lines 52-62), comprising the following steps:

- (c) obtaining a signal representing illumination of at least one selected pixel of the calibration zone in the longitudinal direction with the optical scanning module (fig. 6, col. 11, lines 8-49);
- (d) comparing the signal with pre-set reference to obtain a comparison result and manipulating the comparison result to determine a calibration parameter (figs. 9c, e-f, col. 14, lines 8-28); and

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(e) calibrating the illumination of an image with the calibration parameters in scanning an original document (figs. 9c, e-f, col. 14, lines 29-38).

Melman et al. **do not disclose** (a) activating the back-light module to form a light source and project light onto an optical scanning module of the image scanning device.

Melman et al. do not disclose (b) driving the optical scanning module in the longitudinal direction.

Admitted Prior Art **discloses** (a) activating the back-light module to form a light source and project light onto an optical scanning module of the image scanning device (page 2, lines 2-8).

Admitted Prior Art **discloses** (b) driving the optical scanning module in the longitudinal direction (page 2, line 10).

It would have been obvious to one skilled in the art at the time of the invention to modify Melman et al. wherein the light source (110) disclosed is defined as a back-light module providing a optimum light transmission source.

Regarding claim 4, Melman et al. disclose the method as claimed in claim 1, wherein the selected pixels comprise all pixels of the calibration zone in the longitudinal direction (fig. 7a, col. 12, lines 8-30).

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Regarding claim 5, Melman et al. disclose the method as claimed in claim 1, wherein the selected pixels comprise pixels of every given number of pixels of the calibration zone in the longitudinal direction (fig. 7, col. 12, lines 8-30).

Regarding claim 6, Melman et al. disclose the method as claimed in claim 1, wherein the reference is stored in a memory unit of the image scanning device in advance (fig. 9a, col. 13, lines 54-68).

3. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melman et al. and Admitted Prior Art in view of Anderson, II et al. (US. 5495329).

Regarding claim 2, Melman et al. disclose the method in claim 1.

Melman et al. do not explicitly disclose wherein the illumination signal of each selected pixel comprises signals associated with red, green, and blue colors.

Anderson, II et al. **disclose** wherein the illumination signal of each selected pixel comprises signals associated with red, green, and blue colors 9fig. 1, col. 8, lines 61-67 and col. 9, lines 1-9).

It would have been obvious to one skilled in the art at the time of the invention to modify Melman et al. wherein the pixels calibrated in the apparatus represent RGB signals that provide compensation for color documents, which are regularly used.

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Regarding claim 3, Melman et al. disclose the method as claimed in claim 1.

Melman et al. do not explicitly disclose wherein the calibration parameter comprises parameters for red, green and blue colors.

Anderson, II et al. **disclose** wherein the calibration parameter comprises parameters for red, green and blue colors (fig. 1, col. 9, lines 1-19).

It would have been obvious to one skilled in the art at the time of the invention to modify Melman et al. wherein the pixels calibrated in the apparatus represent RGB signals that provide compensation for color documents, which are regularly used.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35
 U.S.C. 102 that form the basis for the rejections under this section made in this
 Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Liao (US. 5764493).

Regarding claim 7, Liao discloses a back-light module (900) for an image scanning device (fig. 1, col. 3, lines 1-4) comprising

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A casing (1) having an open bottom (fig. 5, col. 3, lines 40-42);

Tubular lighting elements (5) (fig. 5, col. 4, lines 15-17);

A light guide plate (42) arranged between the lighting elements for spreading light from the lighting elements over a surface and projecting the light from the surface (fig. 1, col. 4, lines 3-14);

A frosted light-transmissive plate attached to the open bottom of the casing, light from the light guide plate transmitted through the frosted plate for being projected to a document supporting plate surface of the image scanning device (fig. 1, col. 5, lines 23-29 and lines 35-41).

Regarding claim 8, Liao discloses the back-light module as claimed in claim 7, wherein the frosted plate comprise a frosted board made of acrylic material (fig. 1, col. 5, lines 38-40).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Maciey et al. (US. 6552829) and Koshimizu (US 2001/0030278) are cited to show related art with respect to correcting image data in scanning apparatuses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tia A Carter whose telephone number is 703 - 306-5433. The examiner can normally be reached on M-F (7:00-3:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A Williams can be reached on 703-305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER

Tia A Carter Examiner Art Unit 2626

TAC 12/7/04